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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,551	10/20/2000	Rolf Gnadler	705755US1LKM	5946

7590 06/15/2005

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EXAMINER
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FREJD, RUSSELL WARREN

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/601,551

**Applicant(s)**

GNADLER ET AL.

**Examiner**

Russell Frejd

**Art Unit**

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 and 53 is/are rejected.
- 7) ☒ Claim(s) 28-52 and 54-63 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

In re Application of: Gnadler et al.

***Examination of Application #09/601,551***

1. Claims 27-63 of application 09/601,551, filed on 20-October-2000, are presented for examination. This paper is in response to applicant's amendment received 1-October-2004.

***Claim Objections under 37 CFR 1.75(d)(1)***

2. Claim 28 is objected to under 37 CFR 1.75(d)(1), wherein in applicant's amendment received on the above date, claim 28 was shown as claim 2.

***Claim Rejections under 35 U.S.C. § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering the objective evidence present in the application indicating obviousness or nonobviousness.

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**3.1** Claims 27 and 53 are rejected under 35 U.S.C. 103 as being unpatentable over Hac, patent no. 6,547,343, in view of Zimmer et al., hereinafter Zimmer, patent no. 5,357,434, and further in view of Matsuno, patent no. 6,163,747.

**3.2** Hac teaches a method for measuring the adhesion and adhesion limit comprising:  
measuring the driving state of the vehicle with a plurality of driving-dynamics sensors [col. 3, lines 1-15];

evaluating the data of the driving dynamics sensors [col. 3, lines 35-67];

a computer, using a driving-dynamics simulation model determining the kinetic state of the wheel and the adhesion [col. 12, lines 31-50, col. 11, lines 30-67, col. 17, lines 3-45];

and taking into account at least one stored characteristic diagram comprising tire characteristics and the adhesion limit [Fig. 15, col. 11, lines 31-45].

**3.3** Hac does not teach use of a roadway sensor or adapting an initial set of basic tire characteristics in the course of operation to characterize the current tire characteristics. However, Zimmer teaches adapting an initial set of basic tire characteristics in the course of operation to characterize the current tire characteristics [col. 12, lines 30-50]. It would have been obvious to a tire designer having ordinary skill in the art at the time of the invention to have adapted the tire characteristics in the course of operation to characterize the current tire characteristics as in Zimmer in the method of Hac since the current tire characteristics of Zimmer would have avoided faulty response of slip control as suggested in Zimmer [col. 3, lines 45-60].

**3.4** Furthermore, Matsuno teaches roadway sensors [col. 3, lines 15-18]. It would have been obvious to a tire designer having ordinary skill in the art at the time of the invention to have included determining the state of the roadway with at least one roadway sensor as in Matsuno in the method of Hac and Zimmer since determining the state of the roadway would have indicated

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which coefficient of adhesion to use in Hac [col. 17, lines 10-25] and Zimmer [col. 7, lines 55-67] in the adhesion estimations.

### ***Claim Objections***

4. Claims 28-52 and 54-63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response Guidelines***

5. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

5.1 **Any response to the Examiner in regard to this non-final action should be**

**directed to:** Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, or the examiner's supervisor, Jean Homere, telephone number (571) 272-3780. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

**mailed to:** Commissioner of Patents and Trademarks  
P.O. Box 1450, Alexandria, VA 22313-1450

**or faxed to:** (703) 872-9306

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

Date: 31-May-2005



**RUSSELL FREJD  
PRIMARY EXAMINER**